

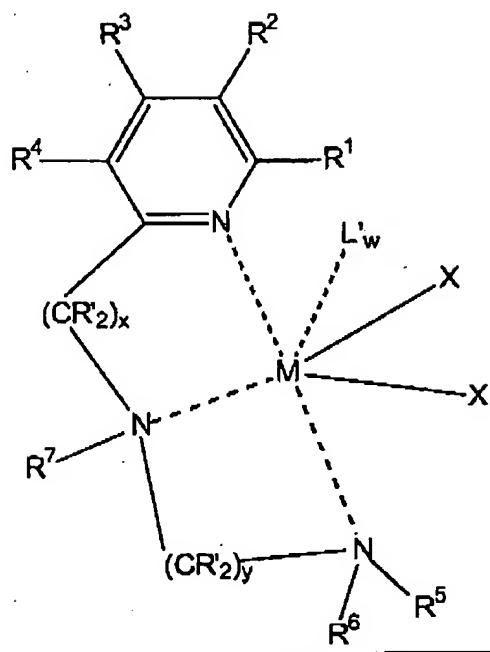
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Amendments to the AbstractRECEIVED
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On page 96, please amend the abstract as follows:

This invention relates to catalyst compounds, catalysts systems and methods to oligomerize or polymerize monomers where the catalyst compound and the catalyst system comprise transition metal catalyst compounds represented by the formula: LMX_2 wherein M is a Group 7 to 11 metal, L is a tridentate or tetridentate neutrally charged ligand that is bonded to M by three or four nitrogen atoms, and at least one terminal nitrogen atom is part of a pyridinyl ring, a different terminal nitrogen atom is substituted with one C_3-C_{50} hydrocarbyl, and one hydrogen atom or two hydrocarbyls; wherein at least one hydrocarbyl is a C_2-C_{50} hydrocarbyl, and the central nitrogen atom is bonded to three different carbon atoms or two different carbon atoms, and one hydrogen atom; X is independently a monocarboxylic ligand or both X are joined together to form a bidentate dianionic ligand. LMX₂ or the formula (LMX₂)₂ wherein: each M is, independently, a Group 7, 8, 9, 10 or 11 transition metal; L is, independently, a tridentate or tetridentate neutrally charged ligand that is bonded to M by at least three nitrogen atoms; at least one of the nitrogen atoms is a central non-pyridinal nitrogen atom and is not bonded to its adjacent atoms by a multibond; at least two of the nitrogen atoms are terminal nitrogen atoms; at least one terminal nitrogen atom is part of a pyridinyl ring; at least one other terminal nitrogen atom is substituted with at least one C_3-C_{50} hydrocarbyl or halohydrocarbyl; the central nitrogen atom is bonded to at least two different carbon atoms; and each X is, independently, an anionic monodentate ligand or two X may join together to form a bidentate dianionic ligand. Useful transition metal compounds include: compounds represented by the formula:

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wherein:

M is a Group 7, 8, 9, 10, or 11 transition metal; N is nitrogen; C is carbon; X is, independently, an anionic monodentate ligand, or both X groups together form a bidentate dianionic ligand; R' is, independently, a hydrogen, a hydrocarbyl, a substituted hydrocarbyl, a halocarbyl, a substituted halocarbyl, a cyclic ring comprising two R' groups on the same carbon, a polycyclic ring comprising two R' groups on the same carbon, a cyclic ring comprising two or more R' groups on adjacent carbons, or a polycyclic ring comprising two or more R' groups on adjacent carbons; x is 1, 2, 3, or 4; y is 1, 2, 3, or 4; R¹, R², R³ and R⁴ are, independently, a hydrogen, a hydrocarbyl, a substituted a hydrocarbyl, a halocarbyl, a substituted halocarbyl, a cyclic ring structure comprising two adjacent R¹, R², R³ or R⁴, or a polycyclic ring structure comprising two adjacent R¹, R², R³ or R⁴; R⁵ is a hydrogen, a hydrocarbyl or a halocarbyl; R⁶ is a C₁ to C₅₀ hydrocarbyl or a C₁ to C₅₀ halocarbyl; R⁷ is a hydrogen, a hydrocarbyl, a substituted hydrocarbyl, a halocarbyl, a substituted halocarbyl; a substituted hydrocarbyl comprising a heteroatom, wherein the heteroatom is bonded to M, or a substituted halocarbyl comprising a heteroatom, wherein the heteroatom is bonded to M; each L' is a neutral ligand bonded to M; and w is 0 or 1.